



Hawaiian Islands Humpback Whale National Marine Sanctuary

23 February 2009

NON-GOVERNMENT (Voting)

Jim Coon
Business and Commerce

David Hoffman
Citizen-At-Large

Dale Hazlehurst
Commercial Shipping

Louis M. Herman, Ph.D.
Conservation

Liz Kumabe
Education

Robert Bruck
Fishing

Luana Howell
Hawai'i County

William A. Friedl
Honolulu County

James Yamamoto
Kaua'i County

Cheryl Sterling
Maui County

Pohai Kirkland
Native Hawaiian

Teri Leicher
Ocean Recreation

Adam Pack, Ph.D.
Research

Michael Stanton
Tourism

Reginald A. White
Whale Watching

GOVERNMENT

Marnie Meyer
DBEDT - OP

Elizabeth Corbin
DBEDT Ocean Resources

Athline M. Clark
DLNR - DAR

Vacant
DOH

Dean Watase
DOT - Harbors

Gene Brighthouse
Fagatete Bay NMS

Jerry B. Norris
OHA - Voting

Jeff Pollack
NMFS - Law Enforcement

Lisa Van Atta
NMFS - PIRO

'Aulani Wilhelm
Papahānaumokuākea MNM

Eric Kingma
WESPAC - Voting

Cindy Barger
USACE

Eric Roberts
US Coast Guard

Rebecca Hommon
US Navy

Ms. Naomi McIntosh
Sanctuary Superintendent,
Hawaiian Islands Humpback Whale National Marine Sanctuary
6600 Kalaiana'ole Highway, Suite 301
Honolulu, Hawaii 96825

RE: The HIHWNMS Sanctuary Advisory Council's opposition to any and all development activities in areas within sanctuary waters that are deemed important humpback whale habitat, including, but not limited to, the four-island region (i.e., the waters between Maui, Molokai, Lanai, and Kahoolawe—primarily the Kalohi, Auau, and Pailolo Channels) and Penguin Bank (a 1015 sq. km area that extends southwest from the west coast of Molokai approximately 70 km).

Dear Ms. McIntosh:

As you know, main Hawaiian Islands are the principal breeding and calving grounds for the endangered North Pacific humpback whale (*Megaptera novaeangliae*). From November through May of each year, an estimated 10,000 humpback whales visit Hawaii's waters with the majority present between approximately the middle of January to the middle of March. The number of whales is estimated to be increasing at approximately 7% annually. Worldwide, wintering humpback whales aggregate preferentially in expansive shallow banks or shallow waters around islands, with "shallow defined as waters of less than 100-fathoms (183-m) deep^{1,2,3,5, and 6}. Within these waters, the whales use the entire water column, including the bottom substrate.⁴ There are two extensive areas within the Hawaiian Islands having these characteristics. These areas include the four-island region (i.e., the waters between Maui, Molokai, Lanai, and Kahoolawe—primarily the Kalohi, Auau, and Pailolo Channels) and Penguin Bank (a 1015 sq. km area that extends southwest from the west coast of Molokai approximately 70 km).

Aerial surveys that began in 1976 and have continued at intervals ever since show that these two regions have the largest concentrations of humpback whales in the Hawaiian Islands^{1,2,3,5,6}. This trend has remained consistent throughout the years. Additionally, these two areas have the largest numbers of calves present.

Protecting the humpback whale and its habitat is the primary mission of the Hawaiian Islands Humpback Whale National Marine Sanctuary. Insuring that humpback whales in Hawaii have maximum use of their preferred habitats is a priority of the Hawaiian Islands Humpback Whale National Marine Sanctuary Advisory Council (SAC). Given the demonstrated importance of Penguin Bank to humpback whales in Hawaii, the SAC strongly recommends against any human activity that potentially permanently restricts the humpback whales free use of Penguin Bank.

It has come to our attention that the Grays Harbor Ocean Energy Company LLC has recently submitted a preliminary permit application to the secretary of the Federal Energy Regulatory Commission of the United States to construct on Penguin Bank 100 offshore fixed three-leg platforms on the ocean bottom. The platforms would extend 50 ft above sea level. A wave energy converter is to be located within each leg for a total of 300



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converters altogether. Additionally, wind turbines may be located on each tower. Wave and wind generators together are expected to yield 1000 MW (megawatts) of power, which will be provided by underwater cable to the island of Oahu. Initial deployment and testing, pending application approvals, is estimated to take place in 2011.

Although the production of renewable "green" energy is laudable and seems a priority of the new Federal Administration, these proposed structures on Penguin Bank have the potential to adversely impact humpback whales by limiting their use of one of the two most significant whale habitats in Hawaii. The physical presence of the structures will limit space and possibly interfere with movement and navigation by the whales, may cause acoustic disturbance or acoustic interference through chronic noise generation by the turbines or other mechanical parts (no mention of noise is given in the preliminary permit application), and might increase the risk of shark predation through increased fish aggregations around the piers of the structures (the application refers to the piers as providing the potential for an artificial reef). Unfortunately, there is no mention in the application of the whales or of any mitigation effort related to the use of the habitat by the whales. The only reference to whales is a statement that the project lays within the boundaries of the Sanctuary.

In consideration of the above facts and factors, we request that the Grays Harbor Ocean Energy Company LLC be informed of the concerns of the HIIHWNMS SAC for the use of Penguin Bank for this project. We feel that it is in the best interest of all parties involved to address this issue expeditiously to prevent the unnecessary expenditure of time and resources.

Additionally, we request that this letter be forwarded to all appropriate parties, such as the Water and Land Committees of both Houses of the State Legislature; Laura Thielen, Chairperson, Department of Land And Natural Resources (Hawaii DLNR); Daniel J. Basta, Director, Office of National Marine Sanctuaries; the Federal Energy Regulatory Commission (FERC); and Army Corps of Engineers, Regulatory Program.

Sincerely,

William A. Friedl
Advisory Council Chair
Hawaiian Islands Humpback Whale
National Marine Sanctuary Advisory Council

cc: Jeffrey Walters, Ph.D., Co-Manager, HI Humpback Whale NMS (Hawaii DLNR, DAR)



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¹Baker, C. S. and Herman, L. M. (1981). Migration and local movement of humpback whales (*Megaptera novaeangliae*) through Hawaiian waters. *Canadian Journal of Zoology*, 59, 460-469

²Herman, L. M. and Antinaja, R. C. (1977). Humpback whales in the Hawaiian breeding waters: Population and pod characteristics. *Scientific Reports of the Whales Research Institute (Tokyo)*, 29, 59-85

³Herman, L.M., Forestell, P. H. & Antinaja, R. C. (1980). *Study of the 1976/77 migration of humpback whales into Hawaiian waters: Composite description*. Final Report to the U.S. Marine Mammal. Commission. (Report No. MMC-77/19). United States National Technical Information Services, Arlington, VA.

⁴Herman, E. Y. K., Herman, L. M., Pack, A. A., Marshall, G., Shepard, C. M., & Bakhtiari, M. (2008). When whales collide: Crittercam offers insights into the competitive behavior of humpback whales on their Hawaiian wintering grounds. *Marine Technology Society Journal*, 41, 35-43.

⁵Mobley, J. R. Jr., Bauer, G. B. & Herman, L. M. (1999). Changes over a ten-year interval in the distribution and relative abundance of humpback whales (*Megaptera novaeangliae*) wintering in Hawaiian waters. *Aquatic Mammals*, 25, 63-72.

⁶Mobley, Jr. J.R., Spitz, S., & Grotenfendt, R. (2001). Abundance of humpback whales in Hawaiian waters: Results of 1993-2000 aerial surveys. Report for Hawaiian Islands Humpback Whale National Marine Sanctuary.